



## Main

|                           |                                      |
|---------------------------|--------------------------------------|
| Range of product          | Lexium 28                            |
| Device short name         | LXM28A                               |
| Product or component type | Motion servo drive                   |
| Format of the drive       | Compact housing                      |
| Line current              | 17.9 A 147.1 % at 220 V, three phase |

## Complementary

|                           |                                                                                                                                                                                                                                                              |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Network number of phases  | Three phase                                                                                                                                                                                                                                                  |
| [Us] rated supply voltage | 200...240 V (- 10...15 %) for three phase                                                                                                                                                                                                                    |
| Supply voltage limits     | 200...255 V three phase                                                                                                                                                                                                                                      |
| Supply frequency          | 50/60 Hz - 5...5 %                                                                                                                                                                                                                                           |
| Network frequency         | 47.5...63 Hz                                                                                                                                                                                                                                                 |
| EMC filter                | Without EMC filter                                                                                                                                                                                                                                           |
| Continuous output current | 22.9 A at 8 kHz                                                                                                                                                                                                                                              |
| Output current 3s peak    | 61 A at 220 V                                                                                                                                                                                                                                                |
| Continuous power          | 4500 W at 220 V                                                                                                                                                                                                                                              |
| Nominal power             | 4.5 kW at 220 V 8 kHz                                                                                                                                                                                                                                        |
| Switching frequency       | 8 kHz                                                                                                                                                                                                                                                        |
| Overvoltage category      | III                                                                                                                                                                                                                                                          |
| Maximum leakage current   | 1.55 mA                                                                                                                                                                                                                                                      |
| Output voltage            | <= power supply voltage                                                                                                                                                                                                                                      |
| Electrical isolation      | Between power and control                                                                                                                                                                                                                                    |
| Type of cable             | Shielded motor cable (temperature: 0...55 °C) copper                                                                                                                                                                                                         |
| Electrical connection     | Spring terminal, clamping capacity: 6 mm², AWG 10 (L1-L2)<br>Spring terminal, clamping capacity: 6 mm², AWG 10 (R, S, T)<br>Spring terminal, clamping capacity: 6 mm², AWG 10 (U, V, W, PE)<br>Spring terminal, clamping capacity: 6 mm², AWG 10 (PA/+, PBe) |
| Discrete input number     | 8 programmable (CN1)<br>1 pulse train input (PTI) (CN1)<br>2 fast capture (CN1)<br>1 safety function STO (CN9)                                                                                                                                               |
| Discrete input voltage    | 24 V DC for logic                                                                                                                                                                                                                                            |
| Discrete input logic      | Positive or negative (CN1)                                                                                                                                                                                                                                   |
| Discrete output number    | 5 logic output (CN1) at 12...24 V DC<br>1 pulse train output (PTO) (CN1)                                                                                                                                                                                     |
| Discrete output voltage   | 12...24 V DC                                                                                                                                                                                                                                                 |
| Discrete output logic     | Positive or negative (CN1)                                                                                                                                                                                                                                   |
| Analogue input number     | 2                                                                                                                                                                                                                                                            |
| Absolute accuracy error   | 0.1 %                                                                                                                                                                                                                                                        |
| Analogue input type       | V_REF voltage analog input: - 10...10 V, impedance: 10 kOhm, resolution: 14 bits<br>T_REF voltage analog input                                                                                                                                               |
| Control signal type       | Servo motor encoder feedback CN2                                                                                                                                                                                                                             |

|                          |                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protection type          | Against reverse polarity: inputs signal<br>Against short-circuits: outputs signal<br>Overcurrent: motor<br>Overvoltage: motor<br>Undervoltage: motor<br>Overheating: motor<br>Overload: motor<br>Overspeed: motor                                                                                                                                       |
| Safety function          | STO (safe torque off), integrated                                                                                                                                                                                                                                                                                                                       |
| Safety level             | SIL 2 conforming to IEC 61800-5-2: 2007<br>SIL 2 conforming to IEC 61508-1: 2010<br>PL d/category 3 conforming to ISO 13849-1: 2008<br>SIL 2 conforming to ISO 13849-1: 2009/AC<br>SIL 2 conforming to IEC 60204-1: 2006<br>SIL 2 conforming to IEC 60204-1: 2009/A1<br>SIL 2 conforming to IEC 60204-1: 2010/AC<br>SIL 2 conforming to IEC 62061: 2012 |
| Communication interface  | CANopen, integrated<br>CANmotion, integrated                                                                                                                                                                                                                                                                                                            |
| Connector type           | RJ45 (CN4) for CANopen, CANmotion                                                                                                                                                                                                                                                                                                                       |
| Method of access         | Slave                                                                                                                                                                                                                                                                                                                                                   |
| Transmission rate        | 250 kbit/s for bus length of 100...250 m for CANopen, CANmotion<br>500 kbit/s for bus length of 4...100 m for CANopen, CANmotion<br>1 Mbit/s for bus length of 4 m for CANopen, CANmotion                                                                                                                                                               |
| Number of addresses      | 1...127 for CANopen, CANmotion                                                                                                                                                                                                                                                                                                                          |
| Physical interface       | RS485 for Modbus Serial line slave                                                                                                                                                                                                                                                                                                                      |
| Status LED               | 1 LED (red) charge<br>1 LED (green) RUN<br>1 LED (red) error                                                                                                                                                                                                                                                                                            |
| Signalling function      | Servo status and fault codes five 7-segment display units                                                                                                                                                                                                                                                                                               |
| Marking                  | CULus<br>CSA<br>CE                                                                                                                                                                                                                                                                                                                                      |
| Type of cooling          | Integrated fan                                                                                                                                                                                                                                                                                                                                          |
| Operating position       | Vertical                                                                                                                                                                                                                                                                                                                                                |
| Product compatibility    | Servo motor BCH2 (180 mm, 3 motor stacks) at 4500 W<br>Servo motor BCH2 (180 mm, 2 motor stacks) at 3500 W                                                                                                                                                                                                                                              |
| Width                    | 116 mm                                                                                                                                                                                                                                                                                                                                                  |
| Height                   | 234 mm                                                                                                                                                                                                                                                                                                                                                  |
| Depth                    | 186 mm                                                                                                                                                                                                                                                                                                                                                  |
| Net weight               | 3.2 kg                                                                                                                                                                                                                                                                                                                                                  |
| Output current 3s peak 2 | 61 A at 220 V                                                                                                                                                                                                                                                                                                                                           |
| Output current 3s peak 3 | 61 A at 220 V                                                                                                                                                                                                                                                                                                                                           |

## Environment

|                                       |                                                                                |
|---------------------------------------|--------------------------------------------------------------------------------|
| Electromagnetic compatibility         | Conducted emission - test level: level 3 category C3 conforming to IEC 61800-3 |
| Standards                             | IEC 61800-5-1                                                                  |
| Product certifications                | cULus[RETURN]CSA[RETURN]CE                                                     |
| IP degree of protection               | IP20                                                                           |
| Vibration resistance                  | 3M4 amplitude = 3 mm (f = 9...200 Hz) conforming to IEC 60721-3-3              |
| Shock resistance                      | 10 gn, type I conforming to IEC 60721-3-3                                      |
| Relative humidity                     | 5...95 % without condensation                                                  |
| Ambient air temperature for operation | 0...55 °C                                                                      |
| Ambient air temperature for storage   | -25...65 °C                                                                    |
| Operating altitude                    | <= 1000 m without derating<br>> 1000...2000 m 1 % per 100 m                    |

## Packing Units

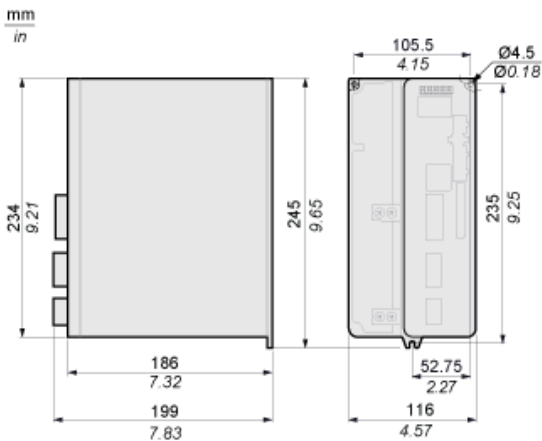
|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 19.6 cm  |
| Package 1 Width              | 25.8 cm  |
| Package 1 Length             | 34.7 cm  |
| Package 1 Weight             | 4.988 kg |

## Offer Sustainability

|                            |                                                                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                           |
| REACH Regulation           | <a href="#"> REACH Declaration</a>             |
| REACH free of SVHC         | Yes                                                                                                                             |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)                                                                      |
| Mercury free               | Yes                                                                                                                             |
| China RoHS Regulation      | <a href="#"> China RoHS Declaration</a>        |
| RoHS exemption information | <a href="#"> Yes</a>                           |
| Environmental Disclosure   | <a href="#"> Product Environmental Profile</a> |
| Circularity Profile        | <a href="#"> End Of Life Information</a>       |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins     |
| PVC free                   | Yes                                                                                                                             |

Dimensions

Dimensions of Drive



## Mounting Clearance

### Mounting Distances and Air Circulation

mm  
in.

